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## A new species of the genus *Jamides* Hübner from Sulawesi, Indonesia (Lepidoptera, Lycaenidae)

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**Abstract** *Jamides elioti* sp. nov. is described from Sulawesi, Indonesia. The new species is easily distinguished from all other *Jamides* species by a unique valva, but its systematic position within the genus is unclear. Judging from the male genitalia, *elioti* seems to belong to the *aleuas* subgroup (*sensu* Hirowatari, 1992) or the *cyta* subgroup (*sensu* Hirowatari, 1992).

**Key words** Lepidoptera, Lycaenidae, *Jamides elioti* sp. nov., taxonomy, Sulawesi.

### Introduction

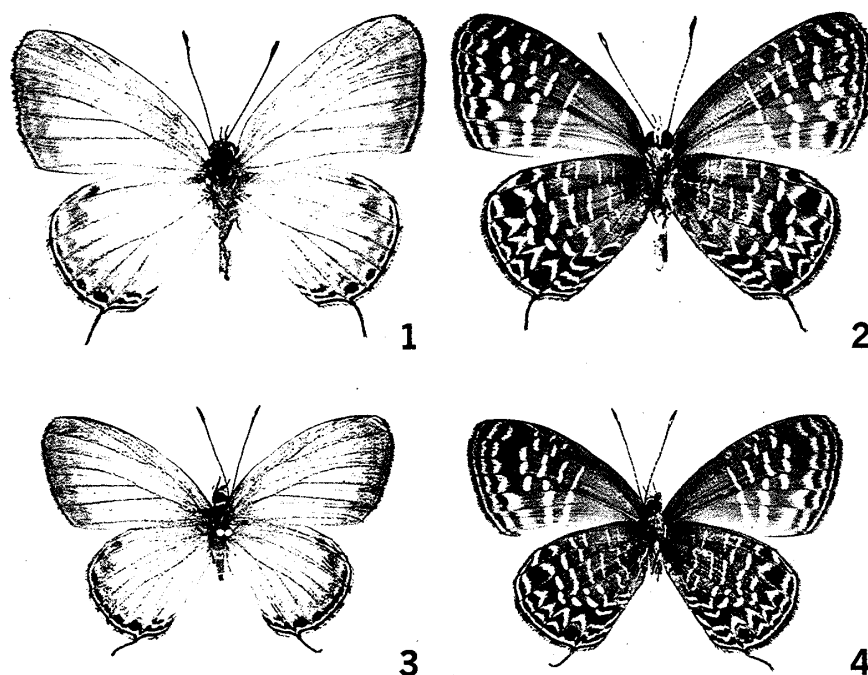
Among polyommata genera, the genus *Jamides* is one of the complicated groups which continues to await revisional work. Some species of restricted regions, such as the Malay Peninsula and Borneo, have recently been arranged and finely illustrated. However, the representatives of Sulawesi have not been revised since some authors described numerous taxa during the early years of this century (*e. g.* Röber, [1886]; Fruhstorfer, 1916, etc.).

While participating in Project Wallace in June, 1985, one of us (Cassidy) found a specimen of the present new species collected by Mr L. Kirton at Dumonga-Bone National Park, Sulawesi. In addition, Takanami (*pers. comm.*) independently recognized this taxon by another single specimen from Palolo, Central Sulawesi. In the present paper, we describe the new *Jamides* species based on the two specimens and comment on its systematic position within the genus.

### *Jamides elioti* sp. nov. (Figs 1-5)

Male. Upperside of wings shining pale sky blue, resembling *Jamides callistus callistus* (Röber, [1886]) from the Philippines. Battledore androconia present. Forewing with whitish discal area, marginal border very narrow, represented by blackish grey cilia. Hindwing with submarginal black spots. Underside of wings light greyish brown. Forewing, the pair of postdiscal white striae in spaces 4-6 dislocated, shifted basad at vein 6; a pair of whitish bars present in spaces 9 and 10; submarginal area rather darker than ground color. Hindwing, as in *J. aratus lunatus* (de Nicéville, 1898) and *J. snelleni* (Röber, [1886]), with the submarginal black spots wedge-shaped in spaces 3-5, and the spot in space 6 largest and quadrate; submarginal spot with orange lunule smaller than that of the two above-mentioned species.

Male genitalia. Dorsum small. Tegumen narrow, dorsal portion narrow. Brachium long and slender, ending in minute hook. Socius small, rounded. Juxta Y-shaped. Phallus relatively long; subzonal sheath 2.5× as long as suprazonal sheath; suprazonal sheath with a Chapman's process; vesica with a triangular spiny cornutus. Valva long,



Figs 1-4. *Jamides elioti* sp. nov. 1, 2. Holotype, ♂. 3, 4. Paratype, ♂. 1, 3. Upperside, 2, 4. Underside.

terminating in an inwardly curved hook, and with a postero-inwardly pointed spine at the middle of the dorsal margin.

Female unknown.

Holotype ♂, Forewing length 16 mm, Palolo, near Palu, Sulawesi, iv. 1984, in the Natural History Museum, London. Paratype. 1 ♂, Forewing length 13 mm, Dumoga-Bone National Park, North Sulawesi, Sg. Tumpah, 13. vi. 1985, L. Kirton.

### Remarks and systematic discussion

The present new species is easily distinguished from all the other species not only by the unique valva of the male genitalia but also by the shining pale sky blue with whitish discal area of the forewing upperside, the wedge-shaped submarginal black spots on the hindwing underside and the whitish bars in spaces 9 and 10 of the forewing underside. The shape of the valva of the male genitalia is somewhat similar to that of *J. aratus lunatus* (de Nicéville, 1898) from Sulawesi, but the large dorsal spine of *elioti* is unique to this species.

In spite of the resemblance of the valvae, *elioti* seems to be related to the species of the *aleuas* subgroup (*sensu* Hirowatari, 1992) or the *cyta* subgroup (*sensu* Hirowatari, 1992) rather than to those of the *aratus* subgroup (*sensu* Hirowatari, 1992) on the basis of the following points: In the *aratus* subgroup, the posterior margins of the suprazonal sheath of the phallus are spatulate and the dorsal portion of the tegumen is broad, but in *elioti*, the suprazonal sheath terminates in a Chapman's process and the dorsal portion of the tegumen is narrow. Although the small socius and slender brachium show affinity with the species of the *cyta* subgroup, there is no further apomorphic character to support it. In the *aleuas* group, a needle-like costal process is present. If the dorsal spine of *elioti* is homologous

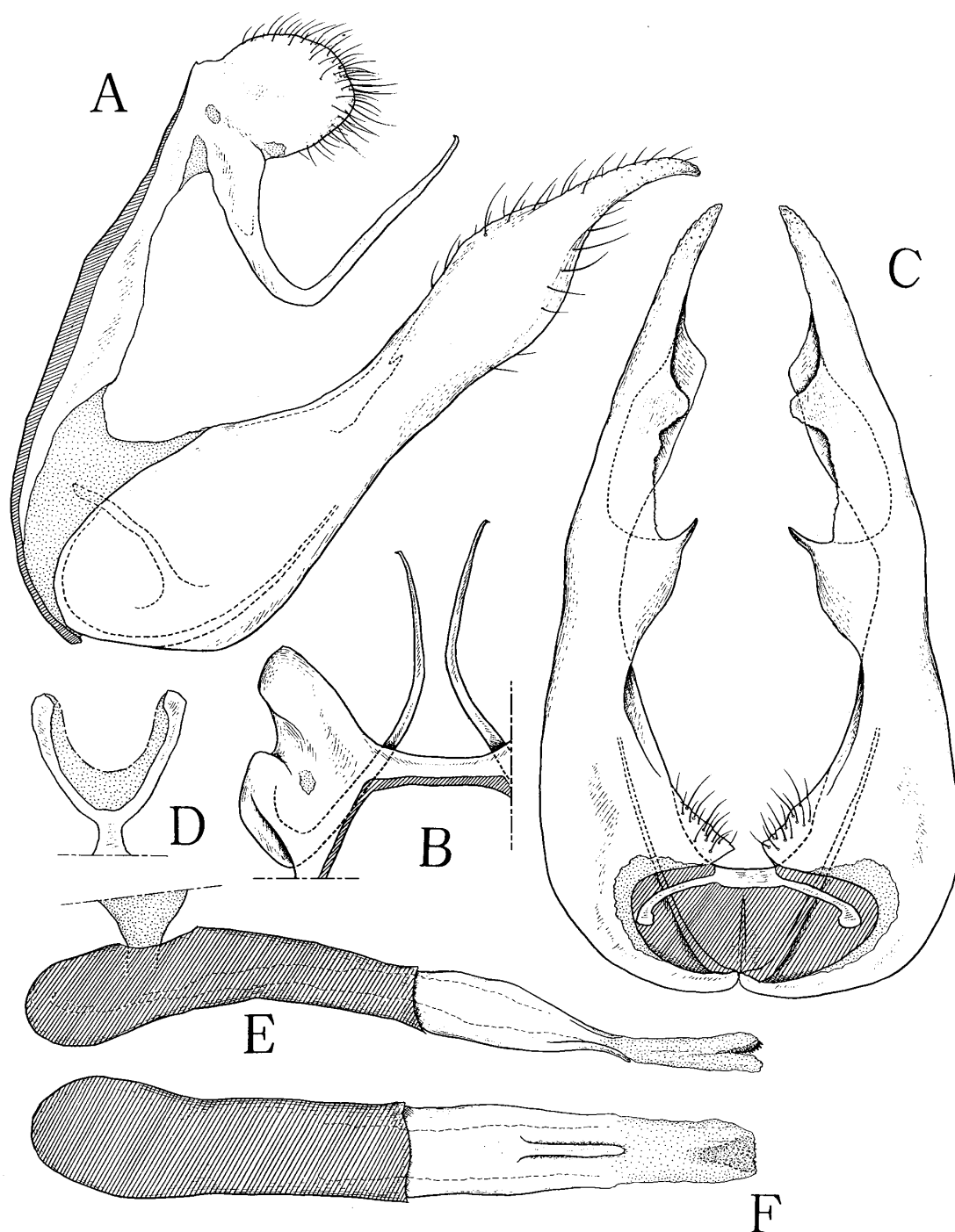


Fig 5. Male genitalia of *Jamides elioti* sp. nov. A. Whole genitalia except phallus in lateral view. B. Dorsum in dorsal view. C. Valvae in dorsal view. D. Juxta in posterior view. E. Phallus in lateral view. F. *Ditto* in ventral view.

with the costal process, it follows that *elioti* is related to some species of the *aleuas* subgroup such as *philatus* (Snellen, 1878). Furthermore, it is possible to consider that the unique valva of *elioti* shows an intermediate condition between the species of the *aleuas* subgroup with a needle-like costal process and *festivus* (Röber, [1886]) from Sulawesi which has a peculiar valva with inwardly pointing spines at the middle of the dorsal margin (Hirowatari, 1992, fig. 23 A-D). Although Hirowatari (1992) tentatively placed *festivus* in

the *aleuas* subgroup, *festivus* and *elioti* could be treated as each independent subgroups of their own.

The specific name is dedicated to John Eliot of Taunton, England, who has made a great contribution to our knowledge of the butterfly fauna of the Oriental Region.

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### References

- Fruhstorfer, H., 1916. Revision der Gattung *Lampides* auf Grund anatomischer Untersuchungen. *Arch. Naturgesch.* 81 (1915) (A)(6): 1-46, pls 1-2.
- Hirowatari, T., 1992. A generic classification of the tribe Polyommastini of the Oriental and Australian Regions (Lepidoptera, Lycaenidae, Polyommastinae). *Bull. Univ. Osaka Prefect.* (B)44 (Suppl.): 1-102.
- Röber, J., [1886]. Neue Tagschmetterlings der indo-australischen Fauna. *CorrespBl. ent. Ver. Iris* 1: 45-72, pls 2-5.

### 摘 要

スラウェシ産 *Jamides* 属の 1 新種 (広渡俊哉・Alan C. Cassidy)

インドネシアのスラウェシ島でえられた 2 個体にもとづいて、1 新種 *Jamides elioti* を記載した。本種は翅の斑紋、雄交尾器ともに特異で、他種との識別は容易である。雄交尾器の valva は細長く、Hirowatari (1992) の *aratus* 亜群のものに似るが、*aratus* 亜群では、phallus の先端側方にへら状の突起を有し tegumen の背方が幅広いのに対して、*elioti* では phallus の先端腹方は単一の突起 (Chapman's process) となり tegumen の背方は幅が狭いので、*aleuas* 亜群または *cyta* 亜群の種と近縁であると考えられる。Hirowatari (1992) は、同じくスラウェシに産する *festivus* を暫定的に *aleuas* 亜群に含めたが、*elioti* の valva の背面中央にある突起が *aleuas* 亜群の valva 基部の突起と相同であるとすれば、*elioti* の valva の状態は *aleuas* 亜群の種と *festivus* との中間的な段階であるという可能性もある。

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